## Message

From: Thomas P Quinn [Thomas P Quinn < tquinn@u.washington.edu>]

**Sent**: 4/13/2011 3:08:30 PM

To: rinella@uaa.alaska.edu;Phil North/R10/USEPA/US@EPA;Shoren Brown Ex. 6 PII, Shoren Brown ; hil

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CC: Harry Rich [hbjr@u.washington.edu]

Subject: Pebble Road

## Dan, Phil, and Shoren,

Harry Rich, a research staff scientist with our program, worked with GIS to estimate the number of streams known to support sockeye salmon likely to be crossed or in close proximity (< 250 m) of the Pebble Mine road system. There are 21 such streams and rivers. He then went to the ADF&G aerial surveys to see what magnitude of salmon runs these support. There are various issues with aerial surveys but to make a long story short these sites make up about 22% of all the sockeye in the system, based on aerial surveys. If we include beach spawning sockeye and those in ponds closely associated with the streams (e.g., Knotson Creek's population is small but there is a very large beach spawning population there as well and probably linked to it via groundwater, etc.) the total rises to 30%.

We are still polishing the numbers and double-checking but if this sort of thing might be of value we can keep you informed. The aerial surveys are not by any means a precise way to count fish, and so these calculations are designed to determine whether the streams and rivers in proximity to the road are a substantial fraction of the system or not, and they indicate that there are lots of sockeye in them.

best wishes,

Tom